DOCUMENT RESUME

ED 377 397 CE 067 896

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TITLE Level of Use of Extension by Two Diverse Audiences and Their Preferred Means for Receiving Extension Information.
PUB DATE Jan 95
NOTE 13p.; Paper presented to the Agricultural Communications Section of the Meeting of the Southern Association of Agricultural Scientists (New Orleans, LA, January 1995).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Adult Education; Delivery Systems; Educational Attitudes; *Educational Technology; *Extension Agents; Farmers; Government Employees; *Information Sources; *Instructional Design; Instructional Materials; *Rural Extension; Teaching Methods
IDENTIFIERS Beef Cattle Production; *North Carolina

ABSTRACT

Two diverse extension audiences in Polk County, North Carolina were surveyed to determine their levels of use of extension information and their preferred means for receiving information. Information was gathered through mailed surveys returned by 48 beef producers and 40 county government workers (about a 67 percent return for each group). Nearly all of the beef producers indicated some to very much use of extension information. County government personnel, however, depend significantly less on extension for information than the beef producers. In their preferences for receiving extension information, beef producers' top five delivery methods were as follows: newsletters, bulletins and pamphlets, personal visits, field days, and method demonstrations. The following were the top five delivery methods for county government personnel: newsletters, newspapers, bulletins and pamphlets, workshops, and leaflets and flyers. Even though newsletters were most popular among both audiences among 35 delivery methods identified, the 2 audiences indicated significant differences in preferences for 8 of the methods. An analysis of the findings showed that county government personnel have different dependence levels on extension as well as different preferences for delivery systems than beef producers. Thus program delivery methods and information must be highly focused for each audience in order to meet their needs and preferences. (KC)

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ED 377 397

LEVEL OF USE OF EXTENSION BY TWO DIVERSE AUDIENCES AND THEIR PREFERRED MEANS FOR RECEIVING EXTENSION INFORMATION

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January, 1995

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Paper Presented to the Agricultural Communications Section, Southern Association of Agricultural Scientists, New Orleans, Louisiana

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ABSTRACT

Title: Level of Use of Extension by Two Diverse Audiences and Their Preferred Means For Receiving Extension Information

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Two diverse Extension audiences in Polk County, North Carolina were surveyed to determine their levels of use of Extension information and their preferred means for receiving Extension information. Those audiences were Polk County beef cattle producers, and county government personnel. In their dependence on Extension, nearly all of the beef producers indicated some to very much use of Extension information. However, county government personnel depend significantly less ($P < .05$) on Extension for information than the beef producers.

In their preferences for receiving Extension information, beef producers preferred top five delivery methods are (1) newsletter, (2) bulletin/pamphlet, (2 *tie) personal visit, (4) field day, and (5) method demonstration. The top five delivery methods preferred by county government personnel included (1) newsletter, (2) newspaper, (3) bulletin/pamphlet, (4) workshop, (5) leaflet/flyer. Even though newsletters were most popular among both audiences, among thirty-five delivery methods identified, the two audiences indicated significant differences ($P < .05$) in preferences for eight of the thirty-five methods identified.

In an analysis of the findings, it is clear that county government personnel have different dependence levels on Extension as well as different preferences for means of receiving information than beef producers. Thus, program delivery methods and information must be highly focused for each audience in order to adequately meet their needs and preferences.

Level of Use of Extension by Two Diverse Audiences and Their Preferred Means For Receiving Extension Information

Douglas M. Clement, John G. Richardson, and R. David Mustian

In 1914, the Smith-Lever Act was passed to form the Agricultural Extension Service (Smith-Lever Act, 1914). The mission of Extension was to "diffuse" research based information to audiences by providing non-formal educational opportunities--which in 1914 consisted mainly of farm visits, demonstrations, meetings, and publications (Epsilon Sigma Phi, 1979.)

Today, the Cooperative Extension System continues with the mission of disseminating research based information to targeted audiences, but the methods of delivery are changing rapidly (EDI, 1992). The electronics/computer age has allowed us to transmit messages across the world almost instantly. While delivery methods are changing, Extension's audiences are also changing. Audiences are becoming more segmented in regard to information needed and each segment often relies on different communication modes to receive needed information (Tyson, 1993).

As audiences become even more segmented, and information technologies continue to advance, it is likely that more delivery methods or communication modes will need to be used to reach the segmented and diverse clientele. Two of these diverse audiences were the focus of this study in Polk County, North Carolina.

Audience Diversity and Preferences

Over the years, Extension information delivery has changed from train car centered meetings that served groups of farmers to television and computer technologies that are capable of serving vast audiences. However, as information is disseminated, many factors influence the success of an educational program.

How people prefer to learn may influence their receptivity of information (Iams and Marion, 1991). If the message is about energy conservation, Iams and Marion (1991) reported that clientele preferred print, aural, and visual learning methods via television, radio and newspapers for obtaining information. Yet, for financial and health management information, they preferred to receive information via means of pamphlets, correspondence courses, and telephone. These researchers also found that age is a factor when considering program delivery methods. At the ages of 40-52, 82% of respondents were willing to rent educational videocassettes, while only 54% of those persons over 61 years of age indicated a willingness to rent an educational video. Enrollment in a home study course found only 44% of persons over 60 willing to enroll, while 71% of those 40-45 were willing to enroll.

Ritter and Welch (1988), found that a home study kit was much more appropriate for home care givers than meetings. Yet, among North Carolina farmers, Richardson (1988) found

that meetings are one of the top five most preferred delivery methods of Extension. Research by Obahayujie and Hillison (1988), also found that different audiences prefer different methods. Part-time cattle farmers preferred personal visits and demonstrations, while full-time cattle farmers preferred newsletters, bulletins, radio, and pamphlets.

Research Objective

As the literature review confirmed, many audiences may hold similar or quite disparate preferences for receiving Extension information. Thus, two primary audiences of the Polk County Cooperative Extension Service were targeted for this study to determine their level of use of Extension information as well as any differences in preferred means for receiving this information. All county government personnel were designated as a targeted audience as were all Polk County beef cattle producers.

Methodology

All members of each of the two targeted audiences were identified and each person was mailed a questionnaire. The questionnaire was developed and tested by using advice from Extension specialists, nearby agents, and other local individuals from related groups of clientele. A cover letter was included with the questionnaire as was a preaddressed return envelope. Return rates for both groups were above 67 percent.

The Z-test was used to determine any statistically significant differences between the two audiences. Significance was determined at the .05 level.

FINDINGS

(Dependence on Extension)

The findings, as indicated in Table 1 indicates that Polk County beef producers generally have some or higher dependence on Extension for information. All of the respondents indicated a dependence level greater than none.

TABLE 1 Polk County Beef Cattle Producers Dependency of Extension Information N=48

	N	%
None	0	0
Little	5	10
Some	25	52
Much	9	19
Very Much	9	19

While the cattle farmers indicated a solid dependency upon Extension for needed information, the responses from the county government personnel found that nearly one-half had little or no dependence (Table 2.)

TABLE 2 Dependency of Extension Information by Polk County Government Personnel N=40

	N	%
None	9	22
Little	10	25
Some	12	30
Much	6	15
Very Much	3	8

In a comparison of the two audience groups, county government personnel were significantly less dependent upon Extension for their informational needs ($P < .05$). These comparisons are shown in Table 3.

TABLE 3 Comparison of Dependency of Extension Information

	Beef Cattle Producers %	County Government Personnel %
Little to None	10	47 *
Some to Very Much	90	53 *

FINDINGS

(Program Delivery Preferences)

Polk County cattle producers indicated newsletters as the most popular means for receiving information when they selected from a list of 35 methods that would likely be most applicable to educational programming for this clientele group. This audience, which could be characterized as a "traditional" Extension audience held very similar preferences as many other similar targeted Extension audiences in North Carolina (Richardson, 1993). Those methods rated most preferred, which were identical to those reported in the prior research are; Newsletter, Bulletin/pamphlet, Personal visit, Field day, Method demonstration, Meeting, and On-farm test. The delivery preferences for the cattle producers are shown in Table 4.

TABLE 4 Preferred Delivery Methods by Polk County Beef Cattle Producers N=48

DELIVERY METHOD	RANKING	N	%
Newsletter	1	42	88
Bulletin/Pamphlet	2.5	28	58
Personal visit	2.5	28	58
Field Day	4	24	50
Method demonstration	5	23	48
Meeting	6	22	46
On-farm test	7	21	44
Office visit	8.5	18	38
Tour	8.5	18	38
Specialty publications	10	17	35
Workshop	11	15	31
Seminar	12.5	14	29
Telephone	12.5	14	29
Letter	14	11	23
Fact Sheet	15.5	9	19
Newspaper	15.5	9	19
Video cassette	17	8	17
Leaflet/flyer	18	7	15
Exhibit	20	6	13
Data Analysis/Results	20	6	13
Conference	20	6	13
Lecture	22	5	10
Home study kit	23.5	4	8
Discussion group	23.5	4	8
Fair	25.5	3	6
Notebook	25.5	3	6
Computer software	27.5	2	4
Audio cassette	27.5	2	4
Symposium	29.5	1	2
Television	29.5	1	2

An audience that could generally be classified as "non-traditional", the county government employees, indicated their highest preferences are for printed information. This audience group prefers newsletters, newspapers, and bulletins or pamphlets as their top three choices for receiving Extension information (Table 5). Altogether, this non-traditional audience preferred print delivery methods in five of their top ten rankings. Perhaps most interesting is the high preference among both audiences for the newsletter as a means of receiving information.

TABLE 5 Preferred Delivery Methods by Polk County Government Personnel N=40

DELIVERY METHOD	RANKING	N	%
Newsletter	1	33	83
Newspaper	2	28	70
Bulletin/Pamphlet	3	27	68
Workshop	4	22	55
Leaflet/flyer	5.5	19	48
Letter	5.5	19	48
Exhibit	7.5	17	43
Personal visit	7.5	17	43
Office visit	9	16	40
Seminar	11.5	14	35
Fact Sheet	11.5	14	35
Telephone	11.5	14	35
Method demonstration	11.5	14	35
Specialty publications	14	13	33
Field Day	15	10	25
Fair	16	9	23
Discussion group	17.5	8	20
Meeting	17.5	8	20
Tour	19	7	18
On-farm test	20	6	15
Home study kit	21	5	13
Teletip	21	5	13
Conference	21	5	13
Video cassette	21	5	13
Lecture	21	5	13
Television	27	4	10
Data Analysis/Results	27	4	10
Radio	27	4	10
Computer software	29.5	3	8
Notebook	29.5	3	8
Fax	32	2	5
Brainstorming	32	2	5
Symposium	32	2	5
Panel	34	1	3
Audio cassette	-	-	-

In comparisons between the delivery preferences of cattle farmers and county government personnel, there were significant differences between these audience groups for eight of the delivery methods as shown in Table 6. The governmental personnel held significantly stronger preferences for newspapers, workshops, personal letter, leaflet/flyers, and exhibits than did the cattle farmers. From the opposite perspective, the cattle farmers preferred field days, meetings, and on-farm tests significantly more than the government personnel.

TABLE 6 Comparison of Delivery Methods Preferred (Percentages)

DELIVERY METHOD	Beef Cattle Producers %	County Government Personnel %
Newsletter	88	83
Bulletin/Pamphlet	58	68
Personal visit	58	43
Newspaper	19	70 *
Workshop	31	55 *
Method demonstration	48	35
Office visit	38	40
Field day	50	25 *
Letter	23	48 *
Specialty publications	35	33
Meeting	46	20 *
Telephone	29	35
Seminar	29	35
Leaflet/flyer	15	48 *
On-farm test	44	15 *
Tour	38	18
Exhibit	13	43 *
Fact sheet	19	35
Video cassette	17	13
Fair	6	23
Discussion group	8	20
Conference	13	13
Data analysis/results	13	10
Lecture	10	13
Home study kit	8	13
Notebook	6	8
Teletip	0	13
Television	2	10
Computer software	4	8
Radio	0	10
Symposium	2	5
Fax	0	5
Brainstorming	0	5
Audio cassette	4	0
Panel	0	3

In Table 7, a comparative ranking of each audience's preferences are shown.

TABLE 7 Comparison of Delivery Methods Preferred (Ranked)

RANKING	DELIVERY METHOD BEEF CATTLE PRODUCERS	DELIVERY METHOD-COUNTY GOVERNMENT PERSONNEL
1	Newsletter	Newsletter
2	Bulletin/pamphlet	Newspaper
2	Personal visit	
3		Bulletin/pamphlet
4	Field day	Workshop
5	Method demonstration	Leaflet/flyer
5		Letter
6	Meeting	
7	On-farm test	Exhibit
7		Personal visit
8	Office visit	
8	Tour	
9		Office visit
10	Specialty publications	Seminar
10		Fact sheet
10		Telephone
10		Method demonstration
11	Workshop	
12	Seminar	
12	Telephone	
14	Letter	Specialty publications
15	Fact sheet	Field day
15	Newspaper	
16		Fair
17	Video cassette	Discussion group
17		Meeting
18	Leaflet/flyer	
19	Exhibit	Tour
19	Data analysis/results	
19	conference	
20		On-farm test
21		Home study kit
21		Teletip
21		Conference
21		Video cassette
21		Lecture
22	Lecture	
23	Home study kit	
23	Discussion group	
25	Fair	
25	Notebook	
26		Television
26		Data analysis/results
26		Radio
27	Computer software	
27	Audio cassette	
29	Symposium	Computer software
29	Television	Notebook
31		Brainstorming
31		Symposium
31		Fax
34		Panel

Discussion

These research results indicate that cattle producers in Polk County have probably received attention from Extension over the years, and have traditionally recognized the organization as a dependable supplier of agricultural information. However, other audiences which may be classified as non-traditional, such as county government personnel, may not have been traditionally targeted to receive specific programming attention. This focus on agriculturally related audiences has contributed to the success of Extension, and therefore, is not being criticized in this paper. Yet, as these agricultural audiences continue to decline in numbers, and other pressing community issues arise, Extension is being called upon to focus some of its resources on issues in which it has expertise. In this process, more non-traditional audiences are being targeted, such as the county government personnel. In these new audiences, with a vast array of information resources at their disposal, we can likely expect, as this research has shown, that levels of dependence on the organization may be quite different from those traditional audiences which have previously received primary programming focus.

The need for understanding newer audiences not only relates to the need for programming adjustments, but also calls for improved understanding of the preferences that diverse audiences hold for receiving information from Extension.

As indicated in prior research findings, there is some predictability among different groups of Extension clientele as to program delivery methods that will likely be most preferred by most individuals within those groups. However, equally predictable is the clear indication in this and prior research that among groups, many different preferences will be expressed. However, as the analysis shows, the county governmental personnel hold many preferences that indeed demonstrate that this group generally prefers information in a manner in which they can direct their own learning experience. Since they mostly preferred printed materials, they likely feel that the information contained therein can be studied, reviewed, or used for learning reinforcement and/or reference as they wish. Such use allows these learners to pace their own study and to focus on only the information desired.

In a comparison of preferred methods, the three methods which were significantly more preferred by the cattle farmers can be classified by the Extension educator as predictable and logical. Traditional Extension educational programs that focus on cattle production and marketing have long relied on field days, meetings, and on-farm tests, as well as other experiential means. Therefore, while effective with one audience type, these methods may not be even remotely viable as means of delivering information to audience types such as the governmental personnel. Thus, an understanding of each audience, to include a review of program delivery research relating to the same or similar audiences can be valuable to Extension educators as they develop programs and program delivery systems for those audiences.

Implications

As educators, we need to be client driven as to focusing on their needs, but we need to understand that by being on the "cutting edge" of technology, Extension should educate clientele on educational opportunities that are available, as well as the many different ways that we can deliver needed information.

The Cooperative Extension Service has had one constant factor since its' origin in 1914....CHANGE. Program delivery modes have changed, as well as programming priorities, leadership styles, and yes, even our name. The days are gone when we did the majority of our educational programs on train rides and caravans. The time may have passed when our emphasis was on meetings and farm visits as the heart of our program delivery approaches. Also, as Extension is changing, audiences are changing too, and rapidly becoming more segmented in their behavior, preferences, and needs.

In today's society, we cannot assume anything. As we look at our potential audiences now, we realize that we must effectively target those audiences if we are to engender a positive reaction from them to our programs. We must provide them with information they both want and need. Sending information to everyone about a narrow topic is useless. When informing cattle producers about a meeting, there is little value in informing the entire general public of the meeting, and wasting resources, when only the cattle farmers and related industry people are the ones targeted anyway.

Clearly, segmentation can be highly concise, such as the recognition that in reality, there are many segments even in the cattle farmers group. The sub-audiences could be delineated into purebred producers; cow-calf farmers; feedlot operators; small cattle farmers; large, commercial operations; agribusiness and marketing personnel; and new cattle producers. Each of these groups would likely have informational needs specific to their group, and would need to receive specific programming attention. With the technological advancements in information and office technology, such segmentation can be and is being implemented.

As we look at our segmenting audiences, we recognize that these audiences have needs and motivations that may prevent them from participating in "traditional" program delivery activities of Extension. Too many times, we may tend to think that a successful program is when we have "a good crowd at a meeting". However, if we are successful, and 30 members of our targeted audience out of a total of 100 potential persons attends, we are still missing the other seventy. As we look at our program delivery research, we recognize that we can reach many of our other audience members via newsletters, fact sheets, videos, a home study packet, or other methods that have been shown to be effective in providing information to self-directed learners, whether they are new audiences or more traditional ones. Thus, as we select those delivery methods which will be most effective and efficient for specific audiences, we must utilize all available knowledge of those audiences and their preferences for learning and receiving information. By using this audience analysis for guidance in planning our delivery systems, we as Extension educators should be successful in continuing to meet the needs of our ever-changing society.

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